

**PATENT**

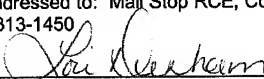
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: C. Banas, et al. Confirmation No.: 7254  
Serial No. 10/840,205 Examiner: Thomas C. Barrett  
Filed: 5/6/04 Art Unit: 3738  
For: METALLIC IMPLANTABLE GRAFT AND METHODS OF MAKING SAME

**Mail Stop RCE  
Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

**CERTIFICATE OF ELECTRONIC FILING**

I hereby certify that this Supplemental Information Disclosure Statement (along with any paper referred to as being attached or enclosed) is being filed electronically on this the 2nd day of February, 2007 addressed to: Mail Stop RCE, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450

  
\_\_\_\_\_  
Lori Dunham

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

**1. Preliminary statements**

Applicants submit herewith patents, publications or other information of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR 1.56. Applicants submit herewith copies of all foreign patent documents and non-patent publications cited herein.

While this Information Disclosure Statement may be "material" pursuant to 37 CFR 1.56 it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR 1.97(b) the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists.

## 2. Identification Of Time Of Filing

This Information Disclosure Statement

*(check and complete (a), (b), (c), (d), or (e))*

(a) ☐ accompanies the new patent application submitted herewith. 37 CFR 1.97 (a)

(b) ☐ is filed within three months after the filing date of the application or prior to the mailing date of the first Office action, whichever is later. 37 CFR 1.97(b)

(c) ☐ is being filed after the time period specified in '1.97(b), but before mailing of a final action under '1.113, a Notice of Allowance under '1.311, or and action that otherwise closes in the application (37 C.F.R. '1.97(c)) and is accompanied by:

☐ Statement under 37 CFR '1.97(e); or

☐ Fee under 37 CFR '1.17(p);

(d) ☐ is being filed after the time period specified in '1.97(c), but before payment of the issue fee (37 C.F.R. '1.97(d)) and is accompanied by:

☐ Statement under 37 CFR '1.97(e); or

☐ Fee under 37 CFR '1.17(p);

(e) ☒ is a supplemental Information Disclosure Statement under 37 CFR 1.99

☒ a previous Information Disclosure Statements was filed on December 30, 2005.

☐ this supplemental Information Disclosure Statement is being submitted as the information was brought to our attention

(f) ☐ The art was encountered in the course of the prosecution of the corresponding foreign application(s) in

3. **Identification Of Person(s) Making This INFORMATION DISCLOSURE STATEMENT**

The person making this statement is

*(check each applicable item (a) and (b))*

(a) ☐ the inventor(s) who signs below

SIGNATURE OF INVENTOR

Type name of inventor who is signing

(b) ☒ the attorney who signs below on the basis of:

*(check each applicable item)*

☐ the information supplied by the inventor(s)

☐ which has been reviewed by the attorney

☐ which has not been reviewed by the attorney

☒ the information in the attorney's file

Reg.No.: 44,259

Tel.No.: (847) 770-6000

Customer No.: 29,335

  
SIGNATURE OF ATTORNEY

Donna E. Becker

Type or Print Name of Attorney

650 Dundee Road, Suite #380

P.O. Address

Northbrook, Illinois 60062

**FORM PTO - 1449 (Modified)**  
List of Patents and Publications  
For Applicant's Information  
Disclosure Statement  
(Use Several Sheets if Necessary)

ATTORNEY DOCKET NO: 6006-157  
APPLICANT: Banas, et al.  
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SERIAL NO: 10/840,205  
GROUP: 3738

**U.S. PATENT DOCUMENTS**

Examiner's Initials	Ref. Desig.	Document Number	Date	Name	Class	Subclass
	AA1					
	AB1					
	AC1					
	AD1					
	AE1					
	AF1					
	AG1					
	AH1					
	AI1					
	AJ1					
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**FOREIGN PATENT DOCUMENTS**

Ref. Desig.	Document Number	Date	Country	Class	Subclass	Trans. Yes No
AL1	01/53559	26.07.01	WIPO	C23C	14/14	
AM1	01/55473	02.08.01	WIPO	C23C	14/00	
AN1	97/07257	27.02.97	WIPO	C23C	14/00	
AO1	00/04204	1/24/00	WIPO	C23C	14/34	
AP1	00/54704	9/21/00	WIPO	A61F	2/06	

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

AR1 "Multilayer Ceramic/Metallic Coatings by Ion Beam-Assisted, Electron Beam Physical Vapor (EB-PVD) Deposition, Penn State Applied Research Laboratory, pp. 1-4 (1997)

AS1 "The Effects of Ion Irradiation on NiTi Shape Memory Alloy Thin Films" by F. Goldberg and E. Knystautas, Proceedings of the Second International Conference on Shape Memory and Superelastic Technologies Asilomar Conference Center, Pacific Grove, California, USA, pp. 177-182 (1997)

AT1 "Vacuum Conditions for Sputtering Thin Film TiNi", Journal of Vacuum Science and Technology, JVST A Online, pp. 1-2 (Abstract view)

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AL2	01/21852	3/29/01	WIPO	C23C	14/34	
AM2	01/43790	6/21/01	WIPO	A61L	33/02	
AN2	01/55473	8/2/01	WIPO	C23C	14/00	
AO2	01/21851	3/29/01	WIPO	C23C	14/34	
AP2	97/44692	11/27/97	WIPO	G02B	6/16	

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

AR2 "Relative importance of bombardment energy and intensity in ion plating", K.S. Fancey, et al., Journal of Vacuum Science & Technology A: Vacuum, Surfaces and Films, Vol. 13, Issue 2, pp. 428-435 (Abstract view) March 1995

AS2 "Thin Film Shape Memory Microvalves with Adjustable Operation Temperature" by Kohl, Dittmann, Quandt and Winzek, Sensors and Actuators, Vol 83, pp. 214-219, (2000)

AT2 "Multicomponent Film Deposition by Target Biasing", IBM Technical Disclosure Bulletin, pp. 1-2 (July 1980)

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Ref. Desig.	Document Number	Date	Country	Class	Subclass	Trans. Yes No
AL3	99/23977	5/20/99	WIPO	A61F	2/06	
AM3	99/62432	12/9/99	WIPO	A61F	2/06	
AN3	1452370	3/21/74	Germany	C21C	37/15	
AO3	0 400 947	5/29/90	Europe	C23C	16/00	
AP3	0 442 303	1/25/91	Europe	C23C	16/26	

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

AR3 "Oriented nickel-titanium shape memory alloy films prepared by annealing during deposition" by Kathleen Gisser, et al., Applied Physics Letters, Vol. 61, Issue 14, pp. 1632-1634 (Abstract View)

AS3 "Thin Film Shape Memory Alloy Microactuators" by TiNi Alloy Company (online)

AT3 "A Concise History of Vacuum Coating Technology, Part 2: 1940 to 1975" by D. Mattox, [www.svc.org/HistoryofVac2.html](http://www.svc.org/HistoryofVac2.html), pp 1-15

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Ref. Desig.	Document Number	Date	Country	Class	Subclass	Trans. Yes No
AL4	11267462	10/5/99	Japan	B01D	59/34	
AM4	51055724	5/17/76	Japan	C22C	01/02	
AN4	01/56502	8/9/01	WIPO	A61F	2/06	
AO4						
AP4						

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

AR4 "Constitutive Parts of a Shape Memory Alloy Titanium Nickel Thin Film Catheter" by L. Buchailot, et al., Proceedings of the Second International Conference on Shape Memory and Superelastic Technologies Asilomar Conference Center, Pacific Gove, California, USA, pp. 183-188 (1997)

AS4 "The Characteristics of NiTi HCD-Deposited SMA Films" by H. Weixin, et al., Proceedings of the Second International Conference on Shape Memory and Superelastic Technologies Asilomar Conference Center, Pacific Gove, California, USA, pp. 167-172 (1997)

AT4 "Microstructure of Ti-Rich TiNi Thin Films" by A. Ishida, et al., Proceedings of the Second International Conference on Shape Memory and Superelastic Technologies Asilomar Conference Center, Pacific Gove, California, USA, pp. 161-166 (1997)

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(Information Disclosure Statement - Section 9 PTO-1449 (Modified) [6-1] -- page 4 of 9)

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AL5						
AM5						
AN5						
AO5						
AP5						

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

AR5 "The Experimental Use of Steel Mesh Tubes for the Replacement of Arterial Segments," by Larry, Banning G., M.D., et al., Presented at the Third Scientific Meeting of the North American Chapter of the International Society of Angiology, Atlantic City, NJ, pp. 69-75 (June 4, 1955)

AS5 "Progress in Thin Film Shape Memory Microactuators," by Johnson, et al., [www.sma-mems.com/recent.htm](http://www.sma-mems.com/recent.htm) (Overview), pp. 105

AT5 "A Concise History of Vacuum Coating Technology, Part 2: 1940 to 1975," by D. Mattox, [www.svc.org/HistoryofVac2.html](http://www.svc.org/HistoryofVac2.html), pp. 1-5

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AL6						
AM6						
AN6						
AO6						
AP6						

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

AR6 "Model Surfaces for Studying and Controlling the Adhesion of Cells" by M. Mrksich, AVS 47<sup>th</sup> International Symposium, Invited Paper No. BI+EL-TuA1 (October 3, 2000)

AS6 "Cell Response to Chemically and Topographically Modified Surfaces" by D.S. Sutherland, et al., AVS 47<sup>th</sup> International Symposium, Invited Paper No. BI+EL-TuA3 (October 3, 2000)

AT6 "Tissue Formation of Hepatocytes on Micro-Porous Films of Polylactide" by T. Nishikawa, et al., AVS 47<sup>th</sup> International Symposium, Invited Paper No. BI+EL-TuA10 (October 3, 2000)

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	AA7					
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AL7						
AM7						
AN7						
AO7						
AP7						

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

AR7 "Endothelial Cell Organization on Micropatterned Protein Surfaces" by R. Daw, et al., AVS 47<sup>th</sup> International Symposium, Invited Paper No. BI-WeP21 (October 4, 2000)

AS7 "The Nanomechanical Properties of Thin Films" by J.E. Houston, AVS 47<sup>th</sup> International Symposium, Invited Paper No. TF-TuA1 (October 3, 2000)

AT7 "Porous and nonporous polycarbonate Urethane stent-grafts for TIPS formation: biologic responses (abstract)" by Z.J. Haskal and L.J. Brennecke, J. Vasc. Interv. Radiol., Vol. 10, No. 9, pp. 1255-1263 (October 1999)

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### FOREIGN PATENT DOCUMENTS

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AL8						
AM8						
AN8						
AO8						
AP8						

### OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AR8 "Primary Implantation of Polyester-Covered Stent-Grafts for Transjugular Intrahepatic Portosystemic Stent Shunts (TIPSS): A Pilot Study" by Manfred Cejna, et al., Cardiovasc Intervent Radiol, Vol. 22, pp. 305-310 (1999)

AS8 "Sputtering Targets High-Quality Thin Film Materials" by AMETEK Specialty Metal Products online at [www.ametek84.com/fd-sputtering.html](http://www.ametek84.com/fd-sputtering.html), pp. 1-3

AT8 "The influence of Ion irradiation during film growth on the chemical stability of film/substrate systems" by W. Ensinger, Surface and Coatings Technology, Vol. 80, pp. 35-48 (1996)

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**ADDED PAGE**

1. "Anomalous Plastic and Elastic Behaviors of Sputter-deposited TiN with 10 or 20 Inserted Thin Al Layers Evaluated by Nanoindentation" by E. Kusano, et al., AVS 47<sup>th</sup> International Symposium, Paper No. TF-TuA3 (October 3, 2000)
2. "Recent Progress in the Application of Thin Film Shape Memory Alloys" by A.D. Johnson and J.D. Busch, Proceedings of the First International Conference on Shape Memory and Superelastic Technologies Asilomar Conference Center, Pacific Grove, California, USA, pp. 299-310 (1994)
3. "Shape Memory Properties in NiTi Sputter-deposited Film", by J.D. Busch and A.D. Johnson, J Appl. Phys., Vol. 68, No. 12, pp. 6224-6226 (December 15, 1990)
4. "Thin-film Processing of TiNi Shape Memory Alloy" by J.A. Waker and K.J. Gabriel, Sensors and Actuators, A21-A23, pp. 243-246 (1990)
5. "Sputter-deposition of TiNi, TiNiPd and TiPd films displaying the two-way shape-memory effect" by E. Quandt, et al., Sensors and Actuators, A 53, pp. 434-439 (1996)
6. "Applications of Shape-Memory Alloy Thin Films" by A.D. Johnson and V.V. Martynov, Proceedings of the Second International Conference on Shape Memory and Superelastic Technologies Asilomar Conference Center, Pacific Grove, California, USA, pp. 1-8 (1997)
7. "Liquid Sources for Chemical Vapor Deposition of Group 6 Metals and Metal Nitrides" by Gordon, et al., [www.techtransfer.harvard.edu/cgi-bin/TALSearch.cgi?full\\_report=1&case=3](http://www.techtransfer.harvard.edu/cgi-bin/TALSearch.cgi?full_report=1&case=3), Case Number 1709
8. "Stents: Literature," <http://www.phytis.com/liter.htm>, pp. 1-8

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